



Space Research Provides 'Earthshaking' Benefits

by Bob Lessels
Technology Transfer Office

Research aboard the Space Shuttle is helping to provide a way to protect structures from major vibrations such as are produced by severe earthquakes and high winds.

Dr. Mark S. Whorton, an aerospace engineer at the Marshall Center, has been working for several years on resolving vibration problems in the microgravity - or weightlessness of space - environment that can affect sensitive science experiments

conducted aboard the Shuttle in orbit.

"Movements of the Shuttle such as attitude corrections and the activities of the crew members aboard the vehicle create vibrations that can affect delicate experiments being conducted on board," he said. "Solutions to reducing these minor vibrations in space also can be applied to reducing the effect of major vibrations produced by earthquakes and high winds on terrestrial structures such as buildings and bridges."

Whorton has been conducting his

research as part of his doctoral studies program under Dr. Anthony J. Calise in the School of Aerospace Engineering at the Georgia Institute of Technology in Atlanta. The research is part of a larger National Science Foundation effort to understand dynamic loads placed on structures by earthquakes and to identify ways of reducing their effect. The Georgia Tech research team, consisting of Professors Calise, J. I. Craig (Aerospace Engineering) and B. J. Goodno (Civil

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The Children's Parade kicks off the Annual Marshall Center Picnic Saturday. The theme for this year was "Living the Dream." For full picnic coverage, see pages 4 and 5.

Joint Resolution, Center Event Focus Interest on Forum Activities

The Madison County Commission and the governing bodies of the cities of Huntsville and Madison today issued a joint resolution citing the Marshall Center's tremendous impact on the surrounding community over the past four decades.

Huntsville Mayor Loretta Spencer, Madison County Commissioner Faye Dyer and Madison City Council President Ray Stubblefield were to present the resolution to Center Director Dr. Wayne Littles this morning.

The resolution declares this week as "Space Exploration Week," culminating with the 10th Annual Von Braun
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Sally Little Named Director Of Technology Transfer Office

Sally Little, deputy director of Marshall's Technology Transfer Office, has been named director of that office by Center Director Wayne Littles.

Little has served in various roles within NASA's technology transfer community during the past four years, including an interagency assignment with the Technology Reinvestment Program managed by the Defense Advanced Research Projects Agency. At the Marshall Center, she has led in the facilitation of diverse teams composed of industry, academia, and government members from different regions of the nation in their efforts to pursue technology development, deployment and education projects.

Little joined the Marshall Center in 1976 as a materials engineer in the Engineering Physics Division of the Materials and Processes Laboratory. In 1986, she accepted a one-year assignment as executive assistant to the Center director, and in 1988 was selected by NASA to spend the academic year at Harvard University's Lucius N. Littauer Master Program in Public Administration. Previous positions at Marshall include manager, Planning and Requirements Office, Heavy Lift Launch Vehicle Office, and technical assistant to the manager, Systems Management and Integration Office, Solid Rocket Booster Project.

Little has received numerous NASA awards including Woman of the Year in Science and Engineering.



Sally Little

Marshall Employees, Center Receive Disability Awards

The Huntsville Area Committee on Employment of People With Disabilities honored two Marshall employees and the Center last week during the annual National Disability Employment Awareness Month luncheon. Centering on the 1997 theme "Ability—The Bridge to the Future," the Employee of the Year award—federal category—was presented to Marshall employee Dr. Craig Moore of Space Sciences Laboratory. The award honors the disabled employee who best demonstrated the courage, motivation, and outstanding performance required in overcoming obstacles, both on the job and in daily living.



Craig Moore



Shelvie Miller

In selecting Moore, the committee noted that "Despite total blindness, Moore's research contributions and job performance have been exceptional."

Moore has worked at the

Marshall Center for eight years specializing in computer modeling research in support of nonlinear optics and chemical vapor deposition. In addition to his scientific knowledge and skills, Moore has monitored the development of computational hardware for the blind in collaboration with Georgia Institute of Technology, through the Marshall Center Director's Discretionary Fund.

In accepting the honor, Moore said "the award is a reflection on the environment that I work in. It shows what people at Marshall have made possible."



Award from Lee Hockenberry during the Huntsville Area Committee of People with Disabilities luncheon. Photo by Shirley Phillips

Shelvie Miller, manager of Marshall's Disabilities Program, received the committee's Humanitarian Award for demonstrating dedication to advancing the cause of disabled persons in the community.

Miller serves on the Governor's Committee on Employment of People with Disabilities and other advisory committees in the community.

Miller, the Marshall Center's Disabilities Program Manager for 13 years, considers the recognition a significant honor.

"Receiving the Humanitarian Award was a pleasure and a privilege," said Miller. "I am very grateful to those who feel that I am deserving."

The Marshall Center as a whole was presented the Partnership Award. That award, accepted by Associate Director Susan Smith, is presented to an individual or group demonstrating outstanding efforts in promoting the employment of disabled persons in the Huntsville-Madison County area.

The Center was cited for being a leader in the employment of people with disabilities, in providing special equipment which facilitates their accessibility to the work place, and the promotion of the concept of employing people with disabilities throughout the community.

Oct. 15 Activities at Center to Focus on Safety at All Levels

An all-day series of events at Marshall on Oct. 15 has been designed to emphasize each individual's role in assuring safety and as a chance for all employees to renew their commitment to flying Space Shuttle missions safely.

"Focus on Safety Day" will start in Morris Auditorium with a 9 a.m. kickoff program for employees. Speakers will include Center Director Wayne Littles along with two astronauts, who will bring their unique perspective on flight safety and answer

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The experiment team for the Passive Optical Sample Assembly (POSA-1), consisting of Jim Zwiener (left rear) and co-investigators Rachel Kamenetzky (left front), Miria Finckenor (right front) and Jason Vaughn monitor the progress of last week's successful spacewalk to retrieve the experiment from the docking module of the Mir space station. The team, all members of the Materials and Processes Laboratory, will soon evaluate the results of the experiment after some 18 months of exposure to the environment of space. Team member Dr. Palmer Peters is not present. Photo by Jack Ray



A modified NASA solid rocket motor was tested successfully last week at Marshall. The 29-second test was designed to provide a better understanding of nozzle performance on the Space Shuttle's reusable solid rocket motors. The static motor firing is one of a series of tests to define the effects of materials and processing variables on the characteristics of nozzle insulation used on the Space Shuttle's reusable solid rocket motor. The 4-foot-diameter subscale motor firing produced about 100,000 pounds of thrust. Several similar technology test firings have been performed previously at Marshall. **Photo by Terry Leibold**

Safety Day Activities

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questions. The event will also include showing of a motivational Shuttle video, and special entertainment. Mementos of the day will be given to all attendees.

For employees outside the 4200 complex, the Morris Auditorium program will be repeated at 2 p.m. in the cafeteria of Building 4610.

After the kickoff, the safety theme of the day will continue with a Safety and Health Fair, organized by the Marshall Industrial Safety Office, and set up in room G13 of Building 4200. The event will feature information and displays dealing with aspects of workplace as well as home safety. Also, Marshall's coordinator for the NASA Safety Reporting System (NSRS) will be available to answer questions about the NSRS as an alternative method for employees to report safety concerns.

Throughout the day, the visiting astronauts will participate in informal tours of the center. Also, center managers will spend the day in the workplace discussing program status, reviewing safety issues, answering questions, and in general, focusing on the importance of keeping safety our number one priority.

Kelsey-Seybold Gets New Medical Services Contract

by Joyce Eagan

The Marshall Center Occupational Medicine and Environmental Health Services contract has been re-competed. The successful bidder was Kelsey-Seybold Clinic with a new sub-contractor, AJT.

Kelsey-Seybold will continue to operate the medical clinic and AJT will be responsible for Environmental Health/Industrial Hygiene/Radiation Protection activities.

The basic services now provided by the Medical Center will not change. Voluntary physical examinations will continue to be offered to civil service personnel on an annual basis. Job-related/mandatory exams for specific contractors will continue as in the past. The walk-in clinic will continue to see civil service employees for minor illnesses/injuries; job-related illnesses/injuries visits for both civil service and contractor will still continue. Industrial Hygiene personnel will continue to perform annual/periodic surveys of all work areas and will be available to assist you with questions on keeping your work environment healthy.

Changes in the contract structure and overall budget cuts will result in some personnel changes.

Dr. Dye will continue to serve as the Marshall Center medical director and Dr. Lee will continue as a staff physician. Dr. Bauer, however, will be leaving Marshall effective Oct. 31.

Janet Kiessling, chief nurse, is completing her nurse practitioner training. Within a few months, Kiessling will fulfill the duties of nurse practitioner for Marshall employees.

With a performance-based, fixed price contract, it is now more important than ever that employees keep their exam appointments. No-shows and late cancellations will be a severe impact to the operation of the Medical Center. The Medical staff ask for all to help make their operation successful — please, make every effort to keep your appointment or cancel early!

In the Environmental Health/Industrial Hygiene arena, new personnel include Jim CoVan, James Bult (Radiation Safety Officer), and Scott Pinkston. Personnel no longer associated with Marshall include John Noblin, Mike McIntosh, Felicia Phillips, and Steve Holcomb.

Hubble Identifies What May Be The Most Luminous Star Known

Astronomers using NASA's Hubble Space Telescope have identified what may be the most luminous star known -- a celestial mammoth which releases up to 10 million times the power of the Sun and is big enough to fill the diameter of Earth's orbit. The star unleashes as much energy in six seconds as our Sun does in one year.

The image, taken by a University of California, Los Angeles (UCLA)-led team with the recently installed Near-Infrared Camera and Multi-Object Spectrometer (NICMOS) aboard

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Thousands 'Live the Dream' at the 1997 Marshall Picnic

by Carole McLemore, Picnic Publicity

If you missed this past Saturday's annual Marshall Picnic, you missed a great day full of activities and fun, complemented by beautiful fall weather! Dennis Keim, 1997 Marshall Picnic chairman, would like to thank everyone involved including the Picnic Committee, the volunteers, the exhibitors, the special guests and entertainment, and last, but not least, the attendees for helping make this year's picnic a big success.

Special thanks to Col. Gerald E. Luttrell, Commandant of the U.S. Army Ordnance Missile and Munitions Center and School, for providing the military display of two "Hummers," equipped with a TOW missile launcher, an Avenger and a UH-1 "Huey" helicopter.

For those who missed it, Management Mania was a huge success with the "executive team" of Payload Specialist Roger Crouch and Marshall managers Axel Roth, Greg Wilson, Jim Ellis and Bernie Kennedy running their way to victory doing the Dizzy Lizzy, the Balloon Pop, the Hula Hoop and the Whip Cream Dive.

With an estimated crowd of over 4,500 enjoying the excellent weather, everyone came away a winner including those who won the following prizes:

One Pitch Softball:

First - Money Runners coached by Jerald Kerby
Second - His Boy Elroy coached by Greg Rowan

Volleyball:

First - Money Runners coached by Danny Walker
Second - Dig This coached by Leslie Houston



Payload Specialist Roger Crouch with a picnic fan.

Custom Car Show:

People's Choice - Kenny Sanders '64 Volkswagen
First Runner Up - Roger Harwell '57 Chevy
Second Runner Up - James Satterfield '95 Ford Customized Truck

Volunteer Gift Certificate \$50 - Sharon Wright/FA22

Early Bird Meal Ticket Door Prize

JVC VCR - Larry Savage/ES93
Tom Hanks autographed poster - Jean Olivier/TA01
STS-76 poster - Wendell King/CSC
Ron Howard autographed Apollo 13 poster - Pam Cruse/CSC

Door Prize Winners:

\$100 Savings Bond from Regions Bank - Lynn Vu
\$100 Savings Bond from Regions Bank - Kim Howard
Hot Wheels Set - Don McQueen/EP43
Hot Wheels Set - Bill Patterson/ED62
Stepping Stones to Aviation Model Airplane - L. W. Brooks/ROC
Stepping Stones to Aviation Model Airplane - Roy Austin/ROC
1997 Christmas Edition Barbie - Richard Cizek
Nikon Zoom Quartz Camera - Pam Smith/EM31
Bistro Table and 2 Chairs - Anthony Eggleston
\$50 Gift Certificate - Robert Lampert
\$50 Gift Certificate - Carmine DeSanctis/PS01
\$50 Gift Certificate - Carl Roberson/BAMSI
\$50 Gift Certificate - Carole McLemore/JA91
\$50 Gift Certificate - C. O. Jones/SAO
Cordless Phone - Dennis Griffin/EH41
Bissell Green Machine - Brenda Bradford/HEMSI
Igloo Thermocooler Kool Mate - Michael Wright
Sharp 25" T.V. - Lori Martin
Gas Grill - Jim Saile
JVC Boom Box - Don Lorraine

Sports Pavilion Door Prizes:

Terry Bowden Autographed Football - Tom Dollman/LA40
Doug Evans Green Bay Packers Autographed Football - Joyce Meier/CN71
John Stallworth Autographed Football - Denise James/DIS



Children are entertained by Catherine Dines.



Associate Director (Technical) Bob Schwinghamer hoola hoops during "Management Mania."



Cedrick Davis talks to picnic goer about recycling.



"Yummy yun-yum," says Tammy Rowan.

**Photos by
Marshall Center
Photographers**



Astronaut Janice Voss and Payload Specialist Gregory Binteris show picnic goers how to loosen up.



Marshall retiree Woody Bethay with his grandson.



What did these kids find during the haystack hunt?

Control Board Reports International Space Station on Target

With the first launch nine months away, representatives of the 15 nations building the International Space Station gathered in Houston this week to finalize the station's assembly sequence and confirm that construction remains on target.

"All of the partners reported they were on schedule with their contributions to the station," International Space Station Program Manager Randy Brinkley said. "The first elements, the Functional Cargo Block and the U.S. Node 1, remain on track for launches next year. In September, during a General Designer's Review for the third element, the Russian Service Module, we were reassured by the Russian Space Agency that they can meet the scheduled launch date of December 1998."

The latest assembly sequence approved by the board maintains a launch of the European Space Agency's Columbus Orbital Facility in October 2002 and establishes the launch of a third connecting module, called Node 3, to the station. The Revision C Assembly Sequence had been approved in preliminary form during a May board meeting. The last 15 flights of the 45-flight sequence remained under review following the May meeting, pending further evaluation of launch date options for the Columbus module.

The Service Module, the first fully Russian contribution to the station, completed a critical milestone Sept. 12 when the general designer's review was held in Moscow. Under construction at the Khrunichev State Research and Production Space Center in Moscow, the module has progressed rapidly this summer. It remains on target for the December 1998 launch from the Baikonur Cosmodrome in Kazakhstan.

Manufacturing of the module will be completed at Khrunichev in November and it will be moved to Rocket Space Corporation-Energia (RSC-Energia) facilities to begin final

testing. Another general designer's review is scheduled for January 1998, and the module will be shipped to Baikonur to begin launch preparations in late May 1998.

The first station element, the U.S.-funded, Russian-built Functional Cargo Block, is on track for a launch in June 1998. Modifications to the module begun earlier this year have been completed that will allow it to be refueled and to accommodate Soyuz dockings. It completed manufacturing at Khrunichev Sept. 15 and was moved to the RSC-Energia facilities where it is undergoing final testing. In January 1998, it will be shipped to Baikonur.

The first U.S.-built station element, Node 1, was shipped from its Alabama factory to the Kennedy Space Center, in June to begin preparations for launch on the first Space Shuttle assembly mission, STS-88, set for July 1998. The second of two conical-shaped pressurized mating adapters that will be attached to either end of the node is being shipped from its California factory to Kennedy this week.

"With the Node and pressurized mating adapters now at Kennedy for launch processing and the FGB ahead of schedule for its shipment to Baikonur, it's a busy and exciting time as we prepare for the launch and assembly phase," Brinkley said.

During the next nine months leading to the start of the International Space Station's five-year, 45-flight orbital assembly sequence, the first truss structure, a third mating adapter and the first solar arrays, batteries and radiators for the station will be shipped from factories nationwide to Florida to be readied for launches in early 1999. Less than a year from now, in August 1998, the first station laboratory, the U.S. Laboratory Module, will be shipped from a Huntsville factory to Kennedy to begin final testing and launch preparations.



Forty-four members of the 1997-98 Leadership Huntsville/Madison County class visited the Center last week as part of their Economic Base Day itinerary. The class was briefed on Marshall's Economic Impact to the Community and the center's programs.

Photo by Dennis Olive

Hubble Telescope

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Hubble, also reveals a bright nebula, created by extremely massive stellar eruptions. The nebula is so big (four light-years) that it would nearly span the distance from the Sun to Alpha Centauri, the nearest star to Earth's solar system.

The astronomers estimate that when the titanic star was formed one to three million years ago, it may have weighed up to 200 times the mass of the Sun before shedding much of its mass in violent eruptions.

The UCLA astronomers estimate that the star, called the "Pistol Star" (for the pistol shaped nebula surrounding it), is approximately 25,000 light-years from Earth near the center of the Milky Way galaxy.

What CFC Means to Me...



"The Combined Federal Campaign is a means of providing assistance to people who are in need. It is a good feeling to know that many of our contributions are being distributed to various organizations in our own communities."

Abbie Johnson, CC01

Von Braun Exploration Forum

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Exploration Forum.

On Friday, a free program highlighting the Forum theme, "Chroniclers of Exploration," will be held for Marshall Center employees and contractors at 1:30 p.m. in the Morris Auditorium of Building 4200. Television host and producer Jim Hartz and singer/songwriter Beth Nielson Chapman will be among special guests.

Forum events on Oct. 10 will begin at 6 p.m. with a reception hosted by the National Space Club and Comcast Cablevision of Huntsville.

The Forum itself starts at 7 p.m. and is followed by a black-tie dinner and music by the Jimmy Church Band.

The Forum is sponsored by the Marshall Center, Discovery Communications, the University of Alabama in Huntsville, the National Space Society, the Association of Space Explorers, and the U.S. Space and Rocket Center. It will be open to the public at no charge and tickets are not required this year.

For more information about the Forum, please call 890-6940.

Obituary

Rodney Stewart, 66, Huntsville, died Sept. 22. He retired from Marshall in 1981 where he worked in the S&E Directorate. He is survived by his spouse Ann Stewart.

John Wyatt, 72, Huntsville, died Sept. 26. He retired from Marshall in 1982 where he worked as an aerospace engineering technician. He is survived by his spouse Billy J. Wyatt.

Space Research

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Engineering), for the past eight years has been studying the benefits of using passive and active control strategies to reduce the effects of earthquakes on buildings.

"Technologies we've developed here at Marshall to protect experiments such as those involving crystal growth aboard the Space Shuttle are directly applicable to buildings and bridges during seismic events. Right now we're working on developing technological 'tools' which architects and construction engineers can use when designing more earthquake-tolerant structures and in enabling existing structures to better survive earthquakes," Whorton said.

The National Science Foundation, under its program on Earthquake Hazards Mitigation in the Civil and Mechanical Systems Division, is funding a major research program on structural control. Under this effort, the Georgia Institute of Technology and other universities are involved in various aspects of earthquake engineering such as developing better building materials, passive damping methods, and active vibration control. Research activities at Marshall are focused in the area of active vibration control.

There are several ways to reduce the effect of structural vibrations. A direct approach is to stiffen the structure, which requires changing its mass and therefore its vibration characteristics. While this may be acceptable for many terrestrial applications, the need for strong but lightweight structures in space renders this option unfeasible for NASA.

"Clearly, for applications in the space program, lightweight but equally effective vibration-mitigating alternatives were needed. We found that these technologies had down-to-earth applications as well. One way of countering structural vibrations caused by a strong gust of wind or seismic ground motion is to place sensors and force producing devices called actuators at specific locations on buildings. As sensors in the system measure the motion of the structure, actuators apply forces to counteract the structure's vibrations," Whorton said.

"One such force device would use hydraulic pistons moving counterweights. Another method involves placing adjustable tendons along the sides of structures. In fractions of a second, sensors in the systems can read the structural vibration patterns caused by earthquakes or high winds and adjust the tension on the appropriate tendons to reduce the excessive forces or motions of the building," Whorton said.

All the actively controlled buildings in operation today are in Japan with the exception of one in Taiwan. A TV tower in Nanjing, China, also is to be retrofitted with active vibration control. Other new construction will incorporate the technology, particularly in seismically active regions; and, of course, it may be possible to retrofit the technology to other existing structures.

"This technology - in part derived from the nation's space program - is being adapted to meet the needs of the construction industry around the globe," Whorton said. "The active control technology for vibration isolation is mature and is fully capable of doing the job."

Employee Ads

Miscellaneous

- ★ Baby items: comforter, bumper pads, diaper bag, dust ruffle \$22; smoker grill \$20. 650-3163
- ★ Reverse osmosis water purification system, retail \$504, sell for \$200; Longaberger baskets. 837-0307
- ★ China hutch, casual, walnut stained, 49"x72", 2pc, glass lighted \$175; sofa, beige, contemporary \$125. 883-2757
- ★ Stihl BG 72 leaf blower, new \$183.55, sell for \$125. 232-0188
- ★ Treemont wood burning fireplace insert, black w/glass door, circulating fan \$100. 351-6855
- ★ White wicker bassinet with embroidered skirt \$75, My Brest Friend \$20. 350-1292
- ★ 0.89 carat diamond solitaire ring \$1,800 o.b.o.; 0.42 carat diamond solitaire necklace \$800 o.b.o. 828-2466
- ★ Pair brass china table lamps, 3-way, 32 inches, pair \$25 o.b.o. 881-8879
- ★ John Deere string trimmer \$75. 837-0085
- ★ Student desk, 20"x40"x28" high \$30 o.b.o. 883-2982
- ★ Microwave oven, sharp R4A77, 900 watts, 1.2 cubic feet, turntable \$100. 355-2161
- ★ Registered Chihuahua puppies. 747-5420; Longaberger baskets discontinued: Petunia 4th of July. 837-0307
- ★ Beanie Babies for sale or trade. 971-2773
- ★ Tiller, 3.5 hp, Sears Craftsman \$50; lawn sweeper, 38", pull behind riding mower \$150. 539-6114
- ★ Goodyear Eagle, GSC, 255/45ZR17, less than 500 miles \$200. 726-2529
- ★ HP694C printer with full box, 2 months old \$250. 721-0617
- ★ Table with removeable glass, 4 chairs \$175; camcorder \$300; stereos for teens \$35 and \$30. 650-5375
- ★ Two tickets NASCAR All Pro series, Nashville, Oct. 19, face value \$33 a piece. 461-7434
- ★ Accent table, American Folk Art collection by Lane \$175. 882-1097
- ★ Poplar rice chest circa 1800 \$750; working oak Victrola \$500; oak icebox \$350. 881-8220
- ★ Fireplace insert Ember Hearth \$150; two firewood racks, 9 1/2L x 5"H \$15 ea. 881-6572
- ★ Dresser large solid wood w/hutch type mirror, moving. Other furniture available. 539-6114
- ★ Two tickets to the Elton John concert in Birmingham, AL on Nov. 14. 891-2564

Vehicles

- ★ 1991 Nissan Sentra, 100K miles, air, PS, PB, tape, cruise, 35mpg \$4,200. 882-1833

MARSHALL STAR

Marshall Space Flight Center, Alabama 35812

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Director of Public Affairs - John B. Taylor
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- ★ 1989 Honda Prelude S, red, 5-spd, 141K miles, air, cruise, moonroof, tape \$4,900. 895-8363
- ★ 1966 Dodge Coronet; 4-dr.,slant six engine, 50K actual miles \$1,200 or best offer. 498-3279
- ★ 1990 CRX-HF, 90K miles, AC, AM-FM cassette \$3,000. 882-6129

Wanted

- ✍ Fax machine. 776-3040
- ✍ Set of twin beds with mattresses, box springs, frames, head boards. 650-5375
- ✍ Alto saxophone in good condition, reasonably priced. 433-0004/7331.

Center Announcements

- ✍ **Retirement Breakfast**— Facilities office retirement breakfast will be held Oct. 14 at 8 a.m. at Shoney's restaurant, University and the Parkway.
- ✍ **Flu Shots** — The annual administration of flu shots will be provided at the MSFC Medical Center as follows: Oct. 15 (civil service only), and Oct. 23 and 28 (all on-site personnel). Times each day are 12 noon until 2 p.m.
- ✍ **Senior/NASA Day** — In recognition of the Alabama A&M Senior/NASA Day, tickets are now available for the Alabama A&M - Tuskegee University football game to be played Nov. 8 at 1:30 p.m. at the A&M stadium. General admission tickets are \$10 each, student tickets are \$5 each (ages 6-12 yrs.), and children under 6 are free. Tickets may be purchased in the NASA Exchange office, bldg. 4752, Monday through Friday, 8 a.m.- 4:30 p.m. For additional information contact Alice Sams at 4-0374 or Willie Love at 4-0088.
- ✍ **NARFE**— The National Association of Retired Federal Employees will meet Oct. 11 (this date only) at the Brahan Spring Recreation Center on Ivy Street Park in the north lot. Wayland Cooley of the Tax Assessor's Office will discuss tax assessment, exceptions for homestead, the disabled and low-income property owners. Refreshments at 9:30 a.m., program at 10 a.m. For more information call 837-0382 or 881-3168
- ✍ **Mars Ballroom Dance Club** — The Mars Ballroom Dance Club formal fall dinner dance will be held in the VBC West Hall on Oct. 11 and will feature music by the Paul Chambers combo. Socializing will begin at 6:30 p.m., and a buffet dinner will be served at 7 p.m., followed by dancing from 8 to 11 p.m. Tickets are \$18 per person with a \$3 discount for members; they can be purchased from

- Tamara Landers (544-6818), Pat Sage (544-5427), Ed Ogozalek (837-1486), Linda Kinney (544-0563), and Bob William (544-3998). Reservation for a table of 8 can be made by calling Woody Bombara (650-0200).
- ✍ **Retired Senior Volunteer Program** — The Huntsville/Madison County Senior Center will participate in "Make a Difference Day" on Oct. 27 from 7 a.m. to 6 p.m. at the Senior Center.
- ✍ **Picnic Photos** — Photos made with the astronauts at the Annual Marshall Picnic held on Oct. 4 will be available for pickup starting Oct. 14 in bldg. 4200, room 107.
- ✍ **Toastmasters International** — Toastmasters will meet Oct. 14 at 11:30 a.m. in bldg. 4610 cafeteria conference room.
- ✍ **Procurement Standdown** — The Procurement Office is hosting a Standdown in Bldg. 4200/P110 on Oct. 9 at 8 a.m. to 12 noon each day. Topics to be discussed are centered around the Procurement Office's implementation of ISO 9000 and include the Purchasing Standard Procedure, and new Organizational Work Instructions (OWI's).
- ✍ **AFGE** — The AFGE Local 3434 will hold its monthly meeting Oct. 14 at 11:30 a.m. in conference room 4200, Union Hall G-38.
- ✍ **Blue Cross/Blue Shield** — The Federal representative will be at the Center on Oct. 14, bldg. 4200, room 108 from 9 to 11 a.m. to assist employees with questions and claims. Due to FEHB open season, this will be the last visit until January 1998.
- ✍ **NCMA** — The National Contract Management Association will meet on Oct. 23 at the UAH Beville Center from 7 a.m. to 8:30 a.m. The guest speaker will be Ms. Marlene Cruze. Registration begins at 6:45 a.m. and breakfast will be served at 7 a.m. The cost is \$9 for members and guest. For reservations call 533-3954 by Oct. 20.

Job Opportunities

CPP 98-5-CP, Financial Program Specialist, GS-507-7, (4 vacancies), promotion potential is to GS-12. Office of Chief Financial Officer. Closes October 20.

CPP 98-3-MB, IFMP Training Program Coordinator, GS-301-12/13, with promotion potential to GS-13. Human Resources and Administrative Support Office. Closes October 24.

CPP 98-4-MB, IFMP Training Program Manager, GS-301-14, Human Resources and Administrative Support Office. Closes October 24.

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